

SOME NEW NORTH AMERICAN HOMOPTERA.

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Phlepsius collitus, n. sp.—Resembling *fulvidorsum*, but smaller and paler. Colour fulvous, elytra brown, with two imperfect light bands. Length, ♀, 6 mm.; width 2 mm. Vertex short, obtusely rounded, but little longer on middle than against eye, three times wider than long; disc convex; the anterior margin distinct, but not sharply angled; elytra rather long and narrow; venation distinct, claval veins separate, parallel. Colour: vertex fulvous, sometimes with faint brownish mottling; face uniform dull brown; pronotum fulvous, usually mottled with brown on the disc; scutellum fulvous. Elytra pale, heavily inscribed with brown, omitting three spots on the sutural margin, an oblong area just inside the costa on the apical half, and a pair of oblique bands starting from the first and last sutural spots, which are milky white. In the lightest specimens the brown tends to run together into dark blotches on the costa and between the white spots on the suture. Genitalia, female segment twice the length of the penultimate, the lateral angles obtuse, the posterior margin roundly produced on the median third, and strongly notched in the middle. Disc of the segment fulvous, the posterior margin on each side of the slit black, the lateral angles light.

Described from three females from Ames, Iowa. This species has long been confused with *fulvidorsum*, but is readily distinguished by the shorter head and distinct genitalia.

Phlepsius lippulus, n. sp.—Form of *fulvidorsum* nearly, but slightly smaller, and with a shorter vertex. Colour milky white, with three brown bands. Length 5.5 mm.; width 1.75 mm. Vertex nearly right-angled, one-third longer on middle than against the eye, twice wider than long, acutely angled with front, the margin distinct, except near the eyes. Front rather narrow, margins straight. Pronotum long, strongly angled in front, disc convex in both diameters. Elytra rather narrow, the venation obscure. Colour: vertex pale orange, an ivory white median line on tip, with a pair of oval brownish spots adjoining it, and a pair of black dots on the margin, nearly half way to the eyes. Face pale, slightly and evenly irrorate with fulvous brown. Pronotum fulvous brown; the anterior submargin white. Scutellum fulvous brown; the oblique margins light, interrupted with a pair of black spots. Elytra milky white, a transverse fulvous brown band across the middle of clavus, another just back of clavus and a narrow apical margin of brown. The second band

forks on the middle of corium, and begins and ends in dark spots on the margin. A round black dot in the middle of the anterior milky band against the claval suture. Genitalia: female segment moderately long, half longer than the penultimate; posterior margin nearly straight, slightly roundly produced on the median half.

Described from two female specimens from Biscayne Bay, Fla., collected by Mrs. Annie T. Slosson. This is a beautiful and strikingly distinct species. The milky-white elytra with the distinct brown bands will readily separate it from any other broad-headed species.

Phlepsioides pauperculus, n. sp.—Resembling *albidus*, but smaller and with a sharper vertex. Colour pale greenish-white; elytra faintly fuscous marked. Length 3 mm.; width less than 1 mm. Vertex nearly as long as pronotum, half wider than long, nearly right-angled before; disc flat; anterior margin thick, slightly acutely angled with face. Face strongly convex in profile; pronotum short, wrinkled, depressed just back of the anterior margin. Elytra short, broad; venation indistinct. Colour: pale greenish-white. Vertex sometimes pale yellowish-white. Elytra pruinose, white or greenish-white, with a very few fuscous dots. Face and beneath pale greenish-white. Genitalia: female segment rather long, over twice the width of the penultimate; posterior margin nearly straight, the lateral angles rounding; median fourth slightly produced and faintly notched.

Described from three specimens taken at Grand Junction, Colo., by E. P. Van Duzee and the author.

Phlepsioides Franconiana, n. sp.—Resembling *Uhleri*, but larger, with a more acutely angled vertex and a narrower head. Length, ♂, 5 mm.; width 1.4 mm. Vertex sloping in same plane as pronotum, slightly transversely depressed, subangulate, with the margins distinct; margins subparallel. Face as in *E. strobi*, the front slightly more flaring above and with the base angled instead of rounding. Pronotum truncate, or very slightly emarginate, its anterior margin strongly curved. Colour: vertex and pronotum fawn colour, with light mottling. Scutellum testaceous, with four white points in a triangle at apex. Elytra brown, with brownish fuscous irrorations and reticulations, a broad, light band just back of scutellum, a narrow line just before the apex of clavus, and an irregular one just before the apex. The bands are strictly transverse, and the middle one is slightly narrower than the brown one in front of it. The reticulations are continued across the light areas. Face fawn colour, with

fuscous irrorations and a white mark just under the apex of vertex. Eyes red. Genitalia: male valve triangular, two-thirds the length of the ultimate segment; plates long, triangular, their margins straight; apices acute, two and one-half times the length of the valve, slightly exceeded by the pygofer. The margins clothed with fine silky hairs, submargins with coarse bristles arising from black spots.

Described from one male from Franconia, New Hampshire, taken by Mrs. Annie T. Slosson, and kindly sent me by Mr. Van Duzee.

Thamnotettix waldana, n. sp.—Form and general appearance of *montana* nearly, slightly larger and lacking the white markings of that species. Testaceous brown; the vertex and margins of elytra pale. Length, ♀, 5.5 mm.; ♂, 5 mm. Vertex transversely depressed, one-fourth longer on middle than against the eye, over twice wider than long, broadly and evenly rounding to the front. Pronotum twice longer than the vertex, rugose on the anterior submargin. Elytra rather long, narrow and closely folded behind; venation distinct, similar to that of *belli*.

Colour rusty brown; the vertex pale yellow, with a trace of rusty brown near base, sometimes forming a transverse band in the male; the tips of the claval nervures and the costal margin of the elytra, from before the middle to just before the tip, white. Face and below varying from pale to nearly all fuscous. Genitalia: female segment rather long, truncate, with a broad triangular notch containing a strap-shaped tooth as long as the segment. Male valve short, obtusely rounding; plates three times as long as valve, rather long, spoon-shaped, the margins clothed with long hairs.

Described from sixteen specimens taken in North Park and Rico, Colo., by the author.

Thamnotettix orbonata, n. sp.—Resembling *atridorsum* and *infus-cata* in general form, but paler. Pale, smoky greenish, with a broad rounding vertex. Length 5.25 mm. Vertex rounding to front, half as long as its basal width, a little more than half the length of the pronotum, one-third longer on middle than against the eye. Head slightly wider than the pronotum; front parallel margined, narrowing to the clypeus; clypeus narrow, constricted above the middle. Elytra much longer than the abdomen, broad and flaring slightly behind. Venation as in *atridorsum*. Colour pale green, slightly tinged with smoky brown. Elytra subhyaline, slightly iridescent; eyes dark; ocelli deep green. Genitalia: female segment short, over twice wider than long; posterior

margin very slightly sinuate; ovipositor long, slightly exceeding the rather slender pygofer.

Described from two females from Biscayne Bay, Fla., collected by Mrs. Slosson.

Thamnotettix Shermani, n. sp.—Resembling *cyperacea* in general appearance. Slightly stouter, paler, with a double-lined vertex margin and a deltocephaloid venation. Length 5.25 mm.; width 1.5 mm. Vertex flat; anterior margin obtusely angular, definitely and slightly acutely angled with the front, a third longer on middle than against eye, half wider than long. Elytra rather long, but with the apex broader than in *cyperacea*. Venation distinct, strong; two cross nervures between the sectors; the central anteapical cell long, constricted and divided beyond the middle. Colour: pale tawny, iridescent over a subolivaceous ground. Vertex pale tawny-yellow; anterior margin white, narrowly margined above and below with black, the black line above almost constricted into six dots. Elytra subhyaline with a slight tawny iridescence. Face pale tawny, below pale straw. Genitalia: female segment rather long; posterior margin nearly straight; the lateral angles prominent.

Described from one female taken at Raleigh, N. C., by Prof. Franklin Sherman, who sent a number of fine Jassidæ for determination.

Chlorotettix rugicollis, n. sp.—Resembling *spatulatus*, but with a broader vertex. Green, with a red band on the margin of vertex. Length 7 mm. Vertex broad, obtusely rounding, but little longer on middle than against eye, two and one-half times longer than wide, evenly rounding to front. Elytra rather long, the veins large and distinct. Colour: pale green, a transverse red band on margin of vertex and front, sometimes extending over the eyes. The male has the elytra clouded with tawny brown. Genitalia: female segment deeply triangularly excavated, with a strap-shaped tooth, similar to that in *spatulatus*. Male valve nearly as wide as the ultimate segment, and about half as long; plates nearly flat, long, triangular; the margins sparsely haired.

Described from four specimens: One female from Jacksonville, Fla., from Otto Heidemann; a pair from Woodbine, N. J., taken Aug. 2nd, 1902, by E. P. Van Duzee; and one female from Victoria, Tex., received from U. S. Nat. Museum. The remarkably broad vertex with the red margin will at once separate this from the other spatulate forms in this group.

Driotura gammeroidea, var. *fulva*, n. var.—Size and form of the species larger than var. *flava*. Entirely brownish fulvous, except the eyes, which are darker.

Described from eight specimens from Denver, Colo., collected by the author.

Driotura robusta, var. *vittata*, n. var.—Size and form of the species, black and white, variable. Vertex with a transverse light line on anterior margin, expanded into two spots at apex; four oblique black stripes on elytra, alternating with four light ones. A transverse light band on abdomen, and a broader one on face.

Described from six examples from Southern Colorado.

Acinopterus acuminatus, var. *variegatus*, n. var.—Form and structure of the species, but much lighter coloured. Vertex, pronotum and scutellum inclined to be reddish, especially in the male. Elytra whitish pruinose, nervures greenish, not margined, except towards apex and along the sutural margin, three fuscous points along the suture, and sometimes one on the disc of each elytron.

Described from twenty-four specimens from Colorado and Arizona.

A. acuminatus, var. *viridis*, n. var.—Form and structure of the preceding nearly; slightly smaller. Bright grass-green both above and below. Eyes and extreme tip of elytra fuscous.

Described from a number of specimens from Southern Colorado and Arizona. This is the common form in Southern Colorado, where it was collected by E. P. Van Duzee and the author.

A. acuminatus, var. *brunneus*, n. var.—Slightly larger than the preceding variety. Vertex, pronotum and scutellum pale green, washed with cinnamon-brown. Elytra pale cinnamon-brown, slightly fuscous at tip. Whole insect with a slight tawny iridescence, below pale green.

Described from three specimens from Rifle, Colo.; taken by the author.

Liburnia Slossoni, n. sp.—Resembling *Stenocranus lautus* in size and general appearance. Somewhat resembling *D. maidis*. Length, macropterous ♀, 5 mm. Face broad, strongly carinate, slightly narrowing above. Elytra very long and narrow, resembling a *Stenocranus*, the outer branch of the first and the inner branch of the third sector uniting with the cross nervure alongside the second sector. Colour: Face black, the carinae light, basal compartment of vertex, pronotum and

scutellum pale creamy. A pair of parallel black stripes extending the entire length, interrupted on the sutures; a pair of black spots outside these on the posterior part of the scutellum, and a pair of black spots behind the eyes. Elytra pale creamy, subhyaline, a brownish stripe covers the outer part of the base of clavus and inner half of corium back to middle, beyond this the nervures are deep smoky-brown, except the outer fork of the outer sector, its cross vein and the outer apical nervure. Legs striped with fuscous and pale.

Described from three females collected at Biscayne Bay by Mrs. Annie T. Slosson. This very large and distinct form in this group is only one of the many fine Homoptera that have come to hand from Mrs. Slosson's collecting, and I take pleasure in naming it after her.

Phyllodinus flabellatus, n. sp.—Larger and lighter coloured than *nervatus*, and with a longer vertex. Testaceous brown, with the posterior half of the vertex, the scutellum and the tips of the short wing pads milky white. Length, brachypterous ♀, 3 mm., width 2 mm. Head slightly narrower than pronotum, vertex nearly quadrate, rounding in front. Front parallel margined, much longer than wide. Elytra about as long as head and pronotum, truncate behind, venation simple, indistinct. Colour: vertex and face dark brown, with about seven narrow interrupted transverse white bands. A light stripe across the apex of front, extending on across the genæ to join the stripe on the reflexed portion of pronotum. Clypeus piceus, pronotum with the anterior half piceous brown, posterior half and scutellum milky white. Elytra brown, the posterior margin milky white, broadest towards the costal margin. Abdomen above brown, a median and three lateral rows of white dashes, the anterior ones reduced to dots. Below dark brown or pitchy. Two anterior pairs of femora dirty straw, their foliaceous tibiæ fuscous, the tarsi white, tipped with black.

Described from two females, one from Washington, D. C., from the collection of Otto Heidemann, and the other from Riverton, N. J., collected by C. W. Johnson, and sent by E. P. Van Duzee. Another female from the District of Columbia apparently belongs here, but is immature and not fully coloured. This is a pretty species, and might be mistaken for a *Pissonotus* but for the foliaceous tibiæ.